

4. The device of claim 1, wherein the powered rotational motor is a DC electric motor.

5. The device of claim 1, wherein the rotating drum is connected to the output of the rotational motor by a gearbox.

6. The device of claim 1, wherein an outer surface of the rotating drum has a surface characterized by anisotropic friction.

7. The device of claim 6, wherein the surface of the rotating drum has a higher coefficient of friction in at least one direction about its circumference than in a direction substantially along its longitudinal axis.

8. The device of claim 7, wherein the surface of the rotating drum has longitudinal splines.

9. The device of claim 8, wherein the splines have a saw tooth profile angled in a forward rotational direction.

10. The device of claim 1, wherein the guide mechanism is configured to cause the resilient elongate element to wrap around the rotating drum at least once.

11. The device of claim 10, wherein the guide mechanism is configured to cause the resilient elongate element to wrap around the rotating drum a plurality of times.

12. The device of claim 10, wherein axis of said rotating drum is oriented parallel to axis of the resilient elongate element.

13. The device of claim 1, wherein the guide mechanism comprises a plurality of rollers oriented with rotational axes thereof orthogonal to rotational axis of said rotating drum with faces of the rollers being substantially flush to outer surface of said rotating drum.

14. The device of claim 11, wherein the guide mechanism includes a tensioner having a roller with an axis parallel to

the longitudinal axis of the rotating drum and positioned so as to press against last wrap of said rope or cable on said rotating drum, thereby increasing the normal force between the resilient elongate element and the rotating drum.

15. The device of claim 1, wherein the guide mechanism includes a safety cam with a handle to manually release a clamping force to prevent unwanted downward motion while maintaining capability for controlled downward motion.

16. The device of claim 1, wherein the guide mechanism includes one or more clip elements and is configured to attach to the resilient elongate element without threading an end of the resilient elongate element through the device.

17. The device of claim 1, further comprising a resilient elongate element engaged with the guide mechanism and the rotating drum.

18. The device of claim 17, further comprising an object having a weight attached to either the resilient element or the device for movement of the object by pulling on the resilient elongate element by the device.

19. The device of claim 18, wherein the object has a weight of 250 pounds and the object can be moved vertically by the device 50 feet in less than or equal to 8 seconds.

20. The device of claim 18, wherein the object is a person and the person is attached to the device.

21. The device of claim 1, wherein the device is configured to be a portable hand-held device.

22. The device of claim 1, wherein the device is configured to be a rope ascender.

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